

Data for Itinerary and Narrative.

22.

(Extracted from Notebook No. II. Oct. 30 to Dec. 10, 1906.)

Mearns, Edgar Alexander, Major and Surgeon, U.S. Army.

Merrill, Elmer D., Botanist, ^{Philippine} Bureau of Science, Manila.

Hutchinson, Wallace S. Forster, Bureau of Forestry.

Fontaine, A. Topographer. Private, Co. "B", 8th Infantry.

Wallace, William, Private, Hospital Corps, U.S. Army.

Estrellus, Wencelius. A Filipino of Panabungs.

Abdarri, a Moro of Zamboanga.

Jumalagan (fide Hutchinson), Sergeant of Philippine Scouts, an Ilocano of N. Luzon, comdg escort.

Buacq, Antonio, ^{Private, 25th Company,} Philippine Scouts, and

4 other Privates of the same company, commanding

5 Caigadores from Antipolo, Luzon.

15 Caigadores from Subaan, Mindoro.

The following was placed in a bottle in ~~the~~ the highest tree on the summit of Mount Halcon. (Prepared by Mr. Wallace S. Hutchinson.)

Geographical and Biological Expedition to Mount Halcon, Mindoro. November, 1906.

Ordered by Major General Leonard Wood, commanding Philippines Division.

Personnel.

Dr. E. A. Mearns, U.S.A. (In charge.)

Dr. E. D. Merrill, Botanist, Philippine Bureau of Science.

W. S. Hutchinson, Forster, Philippine Bureau of Science.

Itinerary and Narrative of Mt. Halcon Expedition.

(Extracted from notebook No. II. Oct. 30 to Dec. 10, 1906.)

[I. See also account furnished a newspaper reporter, by Dr. Elmer D. Merrill, published in The Cable news, Manila, P. I., Thursday, December 13, 1906, pp. 1 and 5.
II. Also Merrill's account of the expedition in the Philippine Journal of Science.

III. Also the report of Mr. Wallace J. Hutchinson, Forest, Philippine Bureau of Forestry. (Nos I and III are in a large Manila envelope.)]

October 30, 1906.—Left Manila at 8 P.M., on the U.S.A.S. "Mindanao" (cutter).

October 31, 1906.—Arrived at Calapan, Mindoro Island, at 6 A.M. Paid respects to Governor Robert S.

Offley (Captain 30th Infantry, U. S. Army) at his office immediately after landing, and called at his house ($1\frac{1}{2}$ miles down the coast) at 4 P.M., meeting his mother, wife and two children. We were the guests of 1st Lieutenant John J. A. Clark, commanding the 25th Company of Philippine Scouts, who, with his daughter, entertained us delightfully then and on our return from Mt. Halcon. Lieutenant Clark, in his capacity of post commander and quartermaster gave us most efficient assistance. [From him I learned that our old friend Mrs. Lee Pier, widow of Major Lee Pier, a medical officer of Volunteers, was teaching the school in Calapan.] From a

Itinerary and Narrative of Mt. Halcon Expedition 26
(Extracted from Notebook No. 11. Oct. 30 to Dec. 10, 1906.)

Prospector named Burris, who preceded Major White in charge of the San Ramon Farm, near Zamboanga, obtained information which led us to start our ^{expedition} journey from a town called Subaan, miles up the coast from Calapan, where the Concejales, Senor Malero, would be able to supply us with a sufficient number of ^{from the coast at Subaan} ~~gargadores~~ for the journey. Mr. Burris and his partner, Mr. Bergin, had opened up a good trail for "12 miles" ^{from the coast at Subaan} to their camp on Dimabay Creek, where they were working a placer mine for gold. From a hill near their placer claims we were promised a view, weather permitting, of Mt. Halcon, which was said to lie almost due south from that point.

Lieutenant Clark, the energetic quartermaster, secured two large native boats ^{for our journey} during the day, in which to transport ^{our} effects and party to Subaan; and he also detailed Sergeant Fernando Tumalaan and five Privates of Philippine Scouts (Ilocanos) to act as guard and escort. Much of the subsequent success of the expedition depended upon the faithful and intelligent performance of duty on the part of these six enlisted men, who ~~were~~ proved to be unfailing, cheerful, and in every way satisfactory.

(Extract from Log-book No. 11. Oct. 30 to Dec. 10, 1906.)

Nov. 1, 1906. — Left Calafdn at 9 A.M., in two large bateas, using sails, paddles, and pushing poles.

Reached Subaan at 3:30 P.M. The Concejales met and took us to his house, where I prescribed for his sick wife. It was All Saints' Day, and a fiesta was in progress. The native band came over to the Concejales' house, and serenaded us. Our effects were deposited in the schoolhouse, where we slept.

Nov. 2, 1906. — Loaded up the packs, and sent out 16 ^{loaded} cargadores, in the early morning, to the mining camp of Messrs. R. E. Burris and C. S. Bergen. The balance of the cargo was then made up to pews, which were left behind for a second load. I started for Bergen's camp ^{on the Binabag River} ^{with cargadores} at 11 A.M., and arrived at 4:30 P.M. The distance ^{up and down hills} was about 10 miles, the trail leading through a heavy forest. Rain fell a part of the time, making the trail slippery.

Nov. 3, 1906. — At Camp Bergen, Binabag River. Climbed a hill.

Nov. 4, 1906. — Camp Bergen

Nov. 5, 1906. — Mangyan ranch W. of Coalapan, N. of Mt. Halcon.

Nov. 7, 1906. — Alay River, Camp 2.

Nov. 9, 1906. — Magyan clearing. Altitude 2200 feet

Itinerary and Narrative of Mt. Halcon Expedition. 26

(Extracted from notebook No. II, Oct. 30 to Dec. 10, 1906.)

Nov. 10, 1906. - Mangyan clearing at 2250 feet.

Nov. 11, 1906. -

Nov. 13, 1906. - Mangyan Village. Altitude feet.

Nov. 14, 1906. - Spur of main ridge of Mt. Halcon alt. 4 feet.

Nov. 15, 1906. -

Nov. 16, 1906. -

Nov. 17, 1906. - Spur of main ridge of Mt. Halcon. Altitude 6300 feet.

Nov. 18, 1906. -

Nov. 19, 1906. - Left Camp 6.

Nov. 22, 1906. - Camp No. 7. Mt. Halcon at trail crossing, 8000 feet.

Nov. 23, " - Returned to Camp no. 6.

Nov. 25, 1906. " " 6, Spur of main ridge Mt. Halcon 6300 feet

Nov. 26, 1906. - Mangyan house, altitude 3000 feet.

Nov. 27, 1906. -

Nov. 28, 1906. - Mangyan house to Mangyan clearing 2250 feet

Nov. 29, 1906. - Mangyan clearing (Camp No. 3). Altitude 2250 feet.

Nov. 30, 1906. - Moved down to foot of hill, on Alag R. (soldiers' camp).

Dec. 1, 1906. - Camp No. 2 $\frac{1}{2}$. Soldiers' camp on Alag River. At 10 P.M. crossed Alag R. and camped between Whitehead and Egbert mts. Shot type of Leysonius mindorensis

Dec. 2, 1906. - Alag R. at 1st Crossing

Dec. 3, 1906. -

Dec. 4, 1906. - Moved to Mangyan clearing on Buena Vista

Dec. 5, 1906. - Moved from Buena Vista Hill to Suba a

Itinerary and Narrative of Mt. Halcon Expedition. 27

(Extracted from Note book No. 11. Oct. 30 to Dec. 10, 1906.)

Dec. 6, 1906. - At Subaan. Left for Calapan at night.

Dec. 7, 1906. - At Calapan.

Dec. 8, ~~and~~ 9, 1906. - At Calapan

Dec. 9, 1906. - Shooting in early morning. Sailed for Manila

Dec. 10, 1906. - Arrived at Manila.

["Note" Mount Dulangan "4500 feet was
Whitehead's camp. He got up to 6000 feet.

Dulangan - Mt. "]

Dec. 16, 1906. - Spent the day on Corregidor
Island, at entrance to Manila Bay.

W. Wallace, Private, ² Hors. Corps, USA.

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D. Fontaine, " Co. "B", 8 Inf'ty. Topographer.

Sergeant Francisco Yumalwan and 5 Privates, 25th Co.

(Philippine Scouts, from Calapan.

Sr. Wenceluis Estrella - Dr. Means's bird shooter.

Moro Abdarri, from Zamboanga

5 Cargadores from Oulipolo, Luzon.

15 " " Subaan, Mindoro.

ITINERARY.

Left Manila 7:30 P.M. Oct. 30, 1906 on U.S.A.T. Min-
=danao. Party accompanied to Calapan by Dr. Horace
C. Fletcher. Arrived Calapan daybreak Oct. 31. Left Calapan
in two native boats Nov. 1, arriving at Subaan, 9 miles
N.W. on the coast, at 3 P.M. Left Subaan 9 a.m. Nov. 2;
marched 10 miles (5 air line) S.W. to Binatay River,
camping on the mining claim of J. J. Bergen and R. E.
Burris. Left Bergen camp 7 a.m., Nov. 5 & marched
S.W. 1 mile to Mangyan clearing on top of hill, named
Buena Vista, elevation 1200 feet. Proceeded down S.
trail to river named the Egbert, distance 1 mile; then
300 yards down stream to Alag River. Crossed R.
at this point and followed Alag R. up stream along
east (R.) bank 2 miles to point where the Alag R. forks.
Proceeded up east (R.) fork (main Alag River), naming
the west (L.) fork the Lawton R., 1 mile; camped at
4 P.M. (Camp No. 2). Nov. 8, left camp 8 a.m., marched

in the Alag 1½ m. to small falls, thence up small stream entering the main Alag R. from the west (L. bank) 300 yards, thence up ridge on the south side of this small stream (R. bank) $\frac{3}{4}$ m. to Mangyan clearing at 2500 feet elevation. Camp No. 3 at this point. Small stream $\frac{1}{4}$ m. down R. slope, to the S.W. of camp.

Broke camp 7:30 a.m. Nov. 12, proceeding along trail on S. side of clearing to cogon-covered caingin on crest of ridge, same elevation as Camp No. 3 (2500 ft.); thence down Mangyan trail, south to Alag R. Distance Camp 3 to Alag R. 2 miles. Stream entering Alag R. a few yards above a Mangyan bijao suspension bridge (7 strands) named the Halcon Bridge. The stream was named the Halcon R. We marched up Halcon R. 50 yards & thence up old Mangyan trail to the right (from left bank of Halcon R.), S.W. (going up parallel to stream); camped at 3:30 P.M. at 3300 feet elevation (Camp No. 4). No water found near this camp.

Nov. 13.—Broke camp at 6 a.m. Proceeded along ridge trail a short distance, followed it down to caingin area east of ridge summit. Three houses in these clearings; one a mere framework, uncoated; two covered and inhabited. One large house near S. end of clearing, cleverly hidden (photographed). From this house a Mangyan trail leads down to the

Bolton R., where we found a plenty of water (as also in a small tributary nearer to the Haugyan house) and cooked breakfast. From Camp No. 4 to Bolton R. crossing $\frac{3}{4}$ m. From I. Bolton R. proceeded N.E. up ridge 1 mile to an elevation of 4500 feet. Camp No. 5. Water, small stream 300 yards down slope to the I.W.

Left Camp No. 5 at 8 a.m., Nov. 17, proceeding along trail on east side of ridge to series of flats at 6300 feet elevation. Camp No. 6, named "Posey Flats" in honor of Posey (E. D.) Merrill, Botanist of the party. Camp No. 3 to Posey Flats distance 1 mile.

Nov. 19, Merrill and Hutchinson completed chopping out a trail to main ridge of Haleon and along the main ridge nearly to the peak, returning to Camp No. 6 at dark, wet, hungry, and tired.

Nov. 20. — Rained nearly all last night. High wind. Rained on —

[The balance was not copied.]

E. D. M.

[G. O. 22.]

GENERAL ORDERS, } WAR DEPARTMENT,
No. 22. } WASHINGTON, January 30, 1907.

I.. The following is published to the Army for the information and guidance of all concerned:

The metes and bounds of the military reservation of Fort D. A. Russell, Wyoming, declared by Executive Order of June 28, 1869, excluding the 160 acres set apart for State Fair Grounds, May 23, 1898, under act of Congress, approved March 2, 1895 (G. O., No. 13, A. G. O., March 19, 1895), are hereby announced as follows:

Beginning at the northwest corner of the City of Cheyenne; thence due south one mile to the Union Pacific Railroad; thence N. $36^{\circ} 00'$ W. 73 chains; thence S. $15^{\circ} 30'$ W. 40 chains; thence N. $74^{\circ} 30'$ W. two miles; thence N. $15^{\circ} 30'$ E. 120 chains; thence due north 125 chains; thence S. $74^{\circ} 30'$ E. 193 chains; thence S. $15^{\circ} 30'$ W. 33 chains; thence due west 60 chains; thence due south 1,760 feet; thence due east 60 chains; thence due south 115 chains 22 feet, to the point of beginning: containing 4,352 acres, more or less.

Lines run with compass; magnetic variation (August, 1870), $15^{\circ} 30'$ East.

Under deed of Claus Sievers, dated June 26, 1903, and decree of the United States Circuit Court, rendered July 25, 1903, the United States acquired the right of way for an irrigating conduit from the source of the water supply of the city of Cheyenne to the reservation.

[1138541, M. S. O.]

II.. The following Executive Order is published to the Army for the information and guidance of all concerned:

EXECUTIVE ORDER.

The military reservation of Camp John Hay, at Baguio, Benguet, on the Island of Luzon, Philippine Islands, as reserved by Executive Order of October 10, 1903 (G. O., No. 48, War Department, November 3, 1903), under authority of section 12, Act of Congress of July 1, 1902 (32 Stat. L., 691), is hereby enlarged so as to include all public lands within metes and bounds as follows, viz:

Beginning at a stone monument 20 feet East from center of the old Benguet Road and near point at which road to Camp John Hay leaves said Benguet Road; thence N. 55° E. 527 feet to a stone monument; thence N. 9° W. 729 feet to a stone monument; thence N. $71^{\circ} 3'$ E. 2,324.3 feet to a stone monument; thence N. 59° E. 623 feet to a stone monument; thence

Concordia, 1907. 32
Data for Itinerary and Narrative.

(Extracted from Notebook No. III. Dec. 21, 1906 to Jan. 5, 1907)

tide to rise and landed at Dagupan about noon; set out immediately in 2 coaches, with escort wagon for baggage luggage, and reached Twin Peaks at 5 P.M.

Dec. 24, 1906. — Left Twin Peaks at 6 A.M. and arrived at ^{Camp John Hay near} Baguio, Benguet Province, Luzon Island, P. I., at 10:30 A.M. At 2 P.M. paid a professional visit to Governor William H. Pack, who was suffering from an abscess of the liver. Later, visited Whitmarsh's store, and then returned to Camp John Hay.

Dec. 25, 1906. — Rose early. Drove with the post people to the chapel at Baguio and heard a Christmas sermon by Bishop Brent.

Dined at 8 P.M. at the house of Commissioner Forbes (a house-warming function). I walked 3 miles to the Forbes' with Mrs. Wood, arriving later than the General, who was detained at Camp John Hay by sending telegrams, but found a short-cut trail, arrived first, and accused us of getting lost. Am dressing Governor Pack's wound daily, — case of liver abscess, traumatic — which keeps me from making any good hikes. The Governor has sent me a pony to ride.

(continued on p. 33.)

Data for Itinerary and Narrative.

(Extracted from Notebook No. III. Dec. 21, 1906 to Jan. 5, 1907.)

Dec. 26, 1906. — Drove to the Hotel Pines, at Baguio, Benguet, with Captain Langhorne who is shooting to-day at Trinidad. Walked back through the pine woods shooting birds.

Jan. 4, 1907. — Caught John Hay to Tugay Peak by stage.

Jan. 5, 1907. — Drove from Twin Falls to Dagupan, Luzon, and thence to Manila on the D.R.R.

Dec. 31, 1906 and Jan. 1, 1907. — Climbed to the summit

of Monte Santo Tomas, Benguet.

July 8, 1907. — At Camp John Hay, Baguio, Benguet Province, Luzon, P. I.: A few days ago a small amount of hail fell; and, to-day, July 8, 1907, a large amount. Hail of large size fell for 7 minutes, the largest about an inch in greatest diameter. Three hailstones that I held in my hand for a moment measured, respectively, 16, 16, and 20 millimeters in greatest diameter. Two were shaped like \bigcirc preceding, the largest like a loaf of bread \square ; the first two were thin, the last thick. The ground was thickly strewn with but not covered by the hailstones.

Note. No. III Notebook was used in registering collections made at Baguio on other trips as well as this; but I see no more material for narrative than the dates on which specimens were taken and the places. (Continued on p. 34.)

Data for Itinerary and Narrative.

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(Expedition to Ilocos Norte, Luzon. Jan. 12 to March 15, 1907.)

(Extracted from Notebook No. IV.)

January 12, 1907. — Left Manila, about noon, on the ~~commercial~~^{commercial} steamer _____ for Currimao

Jan. 13, 1907. — At sea. Landed at Currimao after dark.
In response to a wire from Mr. F. D. Burdett, M. I.

Smith, Treasurer of Ilocos Norte Province, handed me a note, through his co-heros, informing me that a buggy and two ponies were awaiting my convenience for the trip to Laoag.

Jan. 14, 1907. — Drove from Currimao to Laoag, a town of about 50,000 inhabitants. The road was parallel to the seashore.

Jan. 15, 1907. — At Laoag, preparing specimens all day.

Jan. 16, 1907. — Walked ^{from Laoag} to the mouth of the Grande de Laoag River, 4 miles. At 3 P.M. set out with Captain Hartrum for the ~~pueblo~~ of Dingras, a pueblo of about 13,000 inhabitants, 10 miles overland from Laoag, where we arrived before dark.

Jan. 17, 1907. — Rose early and rode from Dingras to Padsan, a Tinguane village of non-Christians 3 $\frac{1}{2}$ hours on trail, probably 16 miles. This trail lies through the valley of the Grande de Laoag River which winds through a broad reach splendidly cultivated land. The road and trail are mostly between rows of bamboo. Left Padsan

Data for Itinerary and Narrative.

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(Extracted from notebook No. IV. Ilocos Norte Province.)
at 3 P.M., and rode back to Dingras, arriving there
at dark

January 18, 1907.—Rode from Dingras to Laoag, 10 miles.

January 19, 1907.—Hauled down the right bank of the Grande
de Laoag River from Laoag. Sun so bright that the
moon was scarcely discernable. Hot! The whole trip
reminded me of experiences in New Mexico: banks of
sand and broad playas along the stream, shallow
pools occupying hollows of old river channels.

Jan. 20, 1907.—Visited the Tribunal in which is the
Post Office; also the market; also new rice machine
in iron-clad building with cement floor.

Jan 20 to 22, 1907.—Hauled on R. bank of the Grande de Laoag River

Jan. 23, 1907.—Walked out on the Vintar road and took
the trail over the sandhills

Jan. 27, 1907.—Went duck shooting with Captain
Hartrum to Paoay or Danum (meaning water) Lake,
the northern extremity was reached about 6 miles south
of Laoag. This is a natural lake, three miles inland from
the sea coast, 33 feet deep, and 7 miles in extent.

February 5, 1907.—Starting early, spent the day in shooting
ducks on Paoay Lake.

Feb. 7, 1907.—Walked from Laoag to the foothills in
search of jungle fowl.

Data for Itinerary and Narrative.

(Extracted from Note book No. IV. Ilocos Norte Province.)

February 15, 1907. — Drove in Dr. Piquet's buggy, 2 gray ponies, from Laoag to the lighthouse at Bojeador, on extreme northwest shore of Ilocos Norte, as well as of island of Luzon. The lighthouse is on a prominent hill up which a good winding road was followed. It is the first land sighted on the approach of vessels from N. China, and is provided with a light of the first class, as I was informed by the keeper. From Bojeador a pony of Mr. John Auchterlonie was ridden on a fair road to the pueblo of Nagpartian, making the total distance from Laoag 34 miles.

February 16 to 18, 1907. — At Nagpartian, Ilocos Norte, Luzon.

February 19, 1907. — Rode with Mr. Auchterlonie to the Burdett manganese mines, at the extreme point of N. Luzon, and returned. Distance 6 miles. Near the mines are fine high rock bluffs overlooking the China Sea and a small fishing village.

March 9, 1907. — Rode from Nagpartian to Laoag, 34 miles.

March 10 to 13, 1907. — Living with Captain Hartrum, at Laoag.

March 13, 1907. — Laoag to Currimao.

Note. — The only additional data for narrative are dates of capture of specimens. Except on trips described above, I was living with Hartrum at Laoag or with Auchterlonie at Nagpartian.

Data for Itinerary and Narrative.

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Expedition to Lake Naujan, Mindoro, and to Mount Mayon,
Albay Province, Q.E. Luzon. March 24-31, 1907.

(Extracted from Notebook No. V.)

March 24, 1907. — Left Manila at 4 P.M. on U.S.A.S.

"Mindanao." Arrived at Naujan (San Jose), Mindoro, at day break. Landed at 8 A.M. March 25th.

March 25, 1907. — At Naujan (the largest town of

Mindoro) we took a trail to the big laguna at 9 A.M., and reached the stream ^{near the} outlet of Lake Naujan at 11 A.M., walking the distance. There we found a small pueblo where we rested and secured boats and boatmen, starting up the Naujan River about noon. The afternoon was spent in hunting on the Naujan River and Lake Naujan.

Coarse floating grass having shoots 40 feet long lined the river shores in many places. Feeding upon the aquatic grass were myriads of fresh-water shells, some of them quite large. The Lake is about the same size as Lake Buluan in Mindanao. It is bordered by lotus, which was the only water lily seen there. The shallows are densely grown with eel-grass (Vallisneria), which has the pistillate flowers lowered by a spiral twisting of the flower stem. I gathered many of the fruiting plants, which were accidentally left behind.

Data for Itinerary and Narrative.

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(Extracted from Notebook No. 7.)

March 26, 1907. — Left Naujan, at 2 A.M. and steamed to the Pueblo of Bulalacao, on the north shore of Bulalacao Bay, on the southeast coast of Mindoro.

In the afternoon steamed miles up the east coast of Mindoro to the native village of Mansalay, on a land-locked bay of the same name, to make inquiries about Tamarao shooting. Then steamed for Legaspi, the capital of Albay Province, Luzon.

March 27, 1907. — Arrived at Legaspi.

March 28, 1907. — At Legaspi, 7 A.M. General Wood, Colonel Hoff, and Captain Dorey went up to the port of Camp Daraga to inspect. Doctor Freer and I remained aboard until 9 A.M. In the afternoon the party rode to Mount Mayon, reaching an altitude of about 2500 feet without finding it necessary to dismount. Returning to the ship the same night the party reembarked for Sabaco.

March 29, 1907. — Landed at Sabaco at 8 A.M. and remained several hours before departing for Lucina

March 30, 1907. — Landed at Lucina at 2 P.M. and remained 3 hours. The Sergeant in charge of the launch "Spokane", which conveyed us from the ship up the river to Lucina, showed us

Data for Itinerary and Narrative.
(Extracted from Notebook No. V.)

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the dry skin of a crocodile which he had shot 2 months previously. The skin had been cut off, shrunken as it was, it measured 17 feet in length in the median line. When fresh this individual measured, according to the Sergeant, just 21 feet in length. Another crocodile of 12 feet had just been shot in the river.

March 31, 1907. - Returned to Manila

Trip to the Batanes Island and Mt. Mayon. May 24 (Manila) to June 7, 1907 (Manila). (Mr. Carpenter and Dr. Mearns did not start with the party from Manila but joined at Camp Wallace, on the west coast of Luzon.)

May 19, 1907. - Mr. William Orr Carpenter and I started from Camp John Hay, Baguio, Benguet for Camp Wallace, La Union, Luzon. Left Camp John Hay at 9 A.M., and rode to the river at the foot of the hill, between Sublaan and Nagillian, arriving at ~~5:45~~ 5:45 P.M. We rode mules. Two soldiers looked after our pack mules. Three soldiers and 2 packers were awaiting our arrival & we slept in an unfinished shed. During the day the weather was fine until noon when a succession of thunder showers filled the hollows and trail with water. The bridges were poor structures, and three were broken through by our two pack mules. The 2

Data for Itinerary and Narrative.
 (Extracted from Notebook No. V.)

packers were inexperienced ~~and~~ and unlisted men; but no damage was done beyond a slight cut on the flank of one mule. The mules that were ridden by Mr. Carpenter and myself were good saddle animals, and gave no trouble.

May 20, 1907. — Rode to Camp Wallace on good Cavalry horses, in 4 hours.

May 21 to 25, 1907. — At Camp Wallace, La Union Province, Luzon, P. I. On May 25th, Mr. Carpenter and I boarded the U.S.A.T. Mindanao at Camp Wallace, before sundown, and sailed with General Wood's party for Aparri on the north coast of Luzon.

May 26, 1907. — Awoke off Bojeador Lighthouse, arriving at Aparri at 2 P.M.

May 27, 1907. — Arrived at Santo Domingo de Basco, Island of Batan, early in the morning and spent the day, remaining until the following morning. Mr. Carpenter and I hunted down the coast to the right and into the neighboring hills. Lunched with the schoolmaster, an Englishman named Edmunds, who, during the afternoon led us across the island to visit the leper colony. Saw 2 men and 1 woman leper, the rest being absent. Mr. Carpenter, who did not accompany us, visited the foothills towards Mount Yriaya. The first bird collected by an ornithologist, on Batan Island

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Miscellaneous Data.

A Poer named Wooring, whom I met on the trail from Baguio to Camp Wallace, Lizzon, told me that he rode with General Wood from Manzanilla to San Luis, in Cuba.

Icarus, if not used, would make a good generic name for birds, bats, or flying fishes. *Look it up.*

B_0 & B = bar. pressure (corrected).

Diff. in height = $C \times \frac{B_0 - B}{B_0 - B}$; if the temperature be taken by a Fahrenheit Thermometer, C (in feet) = $53,494 (H \frac{t_0 + t - 64}{900})$; if a centigrade thermometer is used, C (in meters) = $16,000 (H \frac{t_0 + t}{1000})$.

Mapo mearnsi Evermann and Seale, Proc. U. S. Nat. Mus., XXXI, p. 511, fig. 2.

Dr. Mearns lent Winchester Repeating Shotgun No. 104564 to Mr. Auchterlonie

Capt. Thompson lent Winchester Repeating Shotgun No. 290006 to Mr. Burdett.

Mail Mr. Guy Fay Haight, Baguio, Benguet, P. I. — 2 Corn cob pipes.

A male Deer killed by Major (live weight) in S. Carolina, in 1906, weighed 165 pounds, and was referred to as a large one. Weighed entire.

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Data for Itinerary and Narrative.

(Extracted from Notebook No. V.)

was a specimen of Tringa acuminata shot by Mr. Carpenter. My first bird was Cisticola ; and immediately after 3 swifts of a genus previously unrecorded in the Philippine Islands (Cypselus pacificus). Later Mr. McGregor, who accompanied us and who, with his assistant Señor Celestino, was left on the island, shot 3 more of the new Swifts.

May 28, 1907. — Tried to land at Ibayat Island and failed; returned to Batan.

Itinerary. May 19 to June 7, 1907: —

[Major General Leonard Wood's party left Manila May 24, 1907, on the U.S.A.T. Midanao.] Mr. Carpenter and Dr. Mearns left Camp John Hay, Baguio, to join General Wood:

May 19. — Left Baguio with pack mules.

May 20. — Arrived at Camp Wallace.

May 20-24. — At Camp Wallace.

May 25. — Left Camp Wallace on U.S.A.T. Midanao.

May 26. — Arrived at Aparri, Luzon.

May 27. — Arrived at Santo Domingo de Basco, Batan Island.

May 28. — Tried to land at Ibayat Island, returned to Batan Id.

May 29. — Returned to Aparri Luzon; steamed to mouth of Ableg R.; landed at Fuga Island.

May 30, 1907. — Left Fuga Island.

May 31, 1907. — Off E. coast of Luzon. Arrived at Casiguran.

Data for Itinerary and Narrative.
(Extracted from Notebook No. II.)

May 31, 1907. —

June 1, 1907. — Landed at Casiguran, and left for Bilar, E. coast of Luzon.

June 2, 1907. — Landed for $1\frac{1}{2}$ hours at Belar,

June 3, 1907. — Landed at Tabaco; steamed to the Pueblo of Tibi; visited the hot springs of Pili, inland from Tibi.

June 4 and 5. — Ascended Mount Mayon.

June 6. — At sea.

June 7, 1907. — Arrived at Manila.

May 29, 1907. — Arrived at Aparri where we remained during the morning. Left Aparri at noon and steamed to mouth of Ableg River, intending to row up the river and shoot ducks; but this plan was abandoned, and we landed on the Island of Fuga near sundown.

May 30, 1907. — Spent the morning in gathering specimens on Fuga Island, leaving the island at 1 P.M.

At Fuga Island were handsome ruined stone houses and church. A Spanish gentleman owns thousands of cattle, and has a nice house, in which he entertained us nicely.

Data for Itinerary and Narrative.

(Extracted from notebook No. 5)

May 31, 1907. - Drove off east coast of Luzon. The mountains look high, with fresh land-slide marks visible.

June 1, 1907. - Landed at Casiquran at daybreak, and sailed away about 9 P.M. Spent the time collecting specimens ashore.

June 2, 1907. - Landed for 1½ hours at Baler, Luzon. No guns were taken ashore. Collected shells & plants.

June 3, 1907. - Anchored off Tabaco, at base of Mount Mayon at 11 A.M.; steamed to the village of Tili ^{a distance of one or two miles} and walked inland to the Tili Hot Springs.

June 4 and 5, 1907. - Ascended Mount Mayon (altitude given on charts, 7750 and 7943 feet, respectively). Left Tabaco at 10:30 A.M., under the guidance of a Capuchin Brother named Martin and another Prior. Ascended ^{ed} on the ~~west~~ north side. For several miles we walked through ^{the open} cogon grass-covered slopes, then through 2 or 3 miles of abaca mixed with forest. At 3000 feet elevation tall cane-grass began to be mixed with the forest; and, at a little under 4000 feet, we came ^{out} into open cane-grass which extended up to 6200 feet, above which nothing but lava, scoria and other volcanic rock, without other vegetation than a little moss and considerable fungi and lichens. There are no trees above 4000 feet.

Data for Itinerary and Narrative.
(Extracted from Notebook No. V.)

(June 4 and 5, 1907.) Camped for the night in cane-grass at 4000 feet (just above timber line).

On June 5th, left camp at 4:35 a.m. Mr. Carpenter and I reached the rim of the crater at 8:15 a.m. Returned to camp at 4000 feet at 12:15 P.M. Reached Tabaco and our ship at dark. No bird was seen above the zone of grass, which on that side of Mount Mayon ends at 6200 feet.

Note. - In Notebook No. V is a rough pencil sketch of Mt. Mayon. I also have a photograph of the mountain, and one of our party, given me by General Wood. Also a larger photograph of Mount Mayon from the Legaspi side.

From Notebook No. VI: -

"Itinerary."

"May 1-18 at Camp John Hay, Benguet Province, Luzon.
" 19-20 en route to Camp Wallace, La Union, Luzon.
" 21-25 at Camp Wallace.
" 25-June 7, 1907. - Trip to Batanes & Mt. Mayon.
June 7 to 27, 1907. At Manila (with Capt. Derry).
June 27. - Manila to Dagupan on M. & D. R. R.
June 28. - Dagupan to Camp John Hay.
June 28 to July 19, 1907. - At Camp John Hay.
[July 19 to Aug. 4, 1907. Trip to Haights-in-the-oaks, near
Paway (or Saway?), Benguet Province, Luzon.]

4-

Notes on the Batanes Islands.

(Extracted from type-written data supplied by the Bureau of Military Information, Manila.)

In the Batanes group of islands, we landed at Santo Domingo de Baseo, the capital, ~~on~~ on Batan Island. We also attempted to land on Itbayat Id.

[The Batanes Islands] "are situated between the $128^{\circ} 56' 30''$ East longitude, San Fernando Meridian, and between the $19^{\circ} 57' 30''$ and $20^{\circ} 28' 30''$ North latitude. They are 110 miles distant from the Babuyanes islands, 55 from the Island of Formosa and 175 from the North coast of the island of Luzon."

"Dry or hot season is from May to August, and the coldest season is from ~~May to August~~ November to December and January."

"Batan Island is $9\frac{1}{2}$ miles long. N. 35° E. and S. 35° W., and 1 to 3 miles broad."

"Mount Grada, apparently an old volcano, in its northern part, is 3,806 feet above the sea, and thickly covered with trees; the rest of the island is mountainous. There is a high pinnacle of rock about half a mile north-eastward of this island."

"Batan Island is about 200 kilometers long from North to South and about 4 kilometers wide from east to West."

Notes on the Balanes Islands.

"To the North of Batan Island at a distance of about 20 miles, is the most important island of the group called Itbayat which is also the most fertile and half again as large as Batan."

Note on Fuga Island.

(Extracted from type-written data supplied by the Bureau of Military Information, Manila.)

"At 12:45 o'clock P.M., the Island of Fuga was passed — Latitude 18 degrees, 50' N.; Longitude 127 degrees, 20' E. This island rises about 400 feet above tide water, and is hilly and mountainous in character. It is approximately 10 miles long and 2 miles wide."

S. O. #252, H. D. Luzon, Dec. 25, 1905.

Note. — Ordered to Camp John Hay by Par. 10, S. O. # 74, H. Ph. Div., April 13, 1907.